



Kwame Nkrumah
University of Science
and Technology



B I R D

BUREAU OF INTEGRATED RURAL DEVELOPMENT
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY



BUREAU OF INTEGRATED RURAL DEVELOPMENT

ANNUAL REPORT 2021-2022



Photo: University-community engagement with school pupils,
Drobonso, Sekyere Afram Plains District

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WHO WE ARE

VISION, MISSION, OUR WORK



The Bureau of Integrated Rural Development (BIRD) is one of the leading research departments of the College of Agriculture and Natural Resources (CANR) at the Kwame Nkrumah University of Science and Technology (KNUST). Established in 1979, BIRD offers a comprehensive inter-disciplinary research, training, consultancy, and advisory service in rural development. BIRD has both national and international reputation as one of the foremost University-based institutions for rural development.

What We Do



BIRD conducts comprehensive inter-disciplinary research, training, consultancy and advisory service in rural development. Our high-quality research projects, seminars and publications encompass almost all areas of rural development, rural enterprises development, natural resource management, project planning and management, and good track record for training, capacity

building and rural institutional development. BIRD has working experience in all the 16 Regions and 261 administrative districts in Ghana and is at the forefront of discussions on many contemporary issues related to rural development. BIRD has a reputable inter-disciplinary team who are well accomplished in their disciplines.

Vision Statement



To be a centre of excellence in Africa for the promotion of sustainable and inclusive rural development.

Mission Statement



BIRD exists to provide an interface between the university and rural communities. We transfer innovations and other services available at the university to promote rural development and enhance quality of life in rural areas through the provision of extension, research, teaching and consultancy services.



Our Work



BIRD offers services in six key areas namely: Research and Development Planning, Capacity Building and Institutional Development, Gender and Development, Entrepreneurial Development of Small and Medium Scale Industries, Rural Health and Social Protection. The specific areas of competence under these broad service areas are as follows:

Research and Development Planning

- » Policy, planning and implementation
- » Decentralization and governance
- » Project planning, implementation, monitoring and evaluation
- » Baseline studies, impact evaluations and specialized sector studies
- » Rural access to socio-economic infrastructure
- » Agricultural development planning and management
- » Natural resources management and governance
- » Climate change mitigation and adaptation

Capacity Building and Institutional Development

- » Community-based organisational strengthening and capacity building.
- » Institutional/Organisational assessment
- » Community sensitisation
- » Development of training materials
- » Institutional strengthening and capacity-building
- » Promotion of public/private

partnership and management models

- » Network support for NGOs

Gender and Development

- » Gender specialized studies
- » Mainstreaming gender into development
- » Women's organizations and development

Entrepreneurial Development

- » Training in basic principles of business management
- » Training in credit management
- » Feasibility studies of rural enterprises
- » Enterprise product development
- » Enterprise/project appraisal
- » Rural and Small-Scale Enterprise development
- » Value Chain Development

Rural Health

- » Agricultural health and safety
- » Health impact assessment
- » Health programme planning and evaluations
- » Evidence-based public health

Social Protection

- » Child labour and trafficking
- » Cash transfer programming
- » Productive inclusion
- » Rural access improvement
- » Social protection systems strengthening
- » Inclusive rural development



A MESSAGE FROM THE PROVOST OF CANR



Professor
Ben K.B. Banful



The College of Agriculture and Natural Resources (CANR) is one of the six Colleges of the University mandated to promote agricultural production, rural development and the management of renewable natural resources across Ghana and globally through teaching, research, and outreach. The CANR comprises two Faculties and three Research Centres. The most prominent and enterprising of the three Centres is the Bureau of Integrated Rural Development (BIRD). The mission of BIRD is to provide an interface between the University and rural communities. It aims at transferring innovations and other services available at the University needed to promote rural development to enhance quality of life in rural areas.

Over the past three decades, BIRD has continued to innovate and expand on her mandate such that she has remained the flagship Research Centre of the College and one of the most important in the University. BIRD conducts comprehensive interdisciplinary research, training, consultancy and advisory service in rural development. Her high-quality research projects, seminars and publications encompass almost all areas of rural development, rural enterprises development, natural resource management, project planning and management. BIRD also has a good track record for training, capacity building and rural institutional development. BIRD has working experience in all the sixteen Regions in Ghana and is at the forefront of discussions on many contemporary issues



related to rural development. As a result of the quality of the research conducted by the Centre, there has been a very significant growth in the domain of collaborations, both at the local and international level.

In this maiden annual report of BIRD, activities for the 2021/2022 academic year are catalogued covering the six key areas of services offered by the Centre. These include Research and Development Planning; Capacity Building and Institutional Development; Gender and Development; Entrepreneurial Development of Small and Medium Scale Industries; Rural Health and

Social Protection. Several achievements have been made under each of these six areas and the impetus for further improvement and enhancement have been proposed in this report which includes the establishment of a Rural Development Endowment Fund aimed at providing a stable and predictable funding for BIRD to design and implement strategic development interventions in rural Ghana.

It is my fervent hope that the contents of this annual report would be found stimulating and invigorating while serving as a basis for the continued growth of the Centre both within and outside the confines of KNUST.



A MESSAGE FROM THE DIRECTOR OF BIRD

Ebenezer Owusu-Addo, PhD

Rural development is essential to achieving the 2030 Agenda for Sustainable Development. It is also a reflection of the Agenda's basic tenet of leaving no one behind. In view of this, rural development should be at the centre stage of Ghana's sustainable development efforts.

This is the maiden annual report of BIRD-KNUST (the foremost rural development centre in Ghana) cataloguing our activities for the 2021/2022 academic year. The past 12

months have been a time of expansion and growth for BIRD – expansion in the scope and reach of our research, commissioned projects and growth in numbers of staff, interns and research participants, and an increase in our international collaboration.

We have a renewed focus on university-community engagement and development-driven research all geared towards promoting sustainable and inclusive rural development in Ghana.





Under the university-community engagement initiative, two deprived rural districts (Sene East and Sekyere Afram Plains) have been adopted for sustained engagement over the next five years. This has helped BIRD to establish strong presence in rural communities.

In line with BIRD's vision and that of the College of Agriculture and Natural Resources (CANR), we have started a pilot research project on promoting the health and safety of farmers and agricultural workers. This project focuses on prevention and early identification of risk factors associated with farming populations and agricultural work.

As part of the efforts towards the realization of the Vice-Chancellor's vision of promoting entrepreneurship drive for students, BIRD introduced the Young Consultant Development Programme (YCDP), which seeks to introduce graduates who are early professionals, with an interest or

qualification in development related fields to research-driven consulting in the rural and international development sectors.

We have also expanded our education and training programme by organising a short course in Systematic Reviews. This course has been instrumental in equipping MSc and PhD students with the skills required to conduct a systematic review as part of their PhD thesis.

On behalf of all BIRD staff, I would like to thank all our research and project partners for their contributions to our work. In an increasingly challenging funding landscape, BIRD continues to be fortunate in having a committed and hard-working staff and enjoys support of the US Department of Agriculture (USDA) and USAID through their funded projects, including the ASSESS, METSS and TSUE projects.

A handwritten signature in white ink on a green background. The signature appears to be "Ammanuel Fy." with a stylized flourish at the end.



SIGNIFICANT ACHIEVEMENTS



Research Projects

BIRD has had a highly productive year conducting research and evaluation studies on agriculture, governance, health, climate change and other rural development issues:

- » 9 Grant projects
- » 4 Commissioned/contract research/projects were completed in the year under review
- » A Flagship research project on farmer health and safety
- » Piloting a match-batch-pay App of Agromovil Inc to enhance the supply chain of sorghum



Publications

Over the past year BIRD researchers have produced 38 publications, including peer reviewed journal articles, book chapters, conference papers, policy briefs and technical reports



Media

In 2021/2022 BIRD's media profile increased significantly including a wider coverage on our flagship University-Community Engagement programme. Our researchers were involved in radio interviews. Facebook friends and Twitter followers continue to build with no sponsored advertisement.



Education and Training

- » 14 Courses taught in various departments at KNUST.
- » 44 Professionals and PhD/MSc students attended our short course in Systematic Reviews
- » Supervision of 3 PhD students; 27 MSc students; 14 undergraduate students
- » 25 Local government staff trained in grant proposal writing
- » 50 Graduates and interns received hands-on in the field practical training in contract research and consultancy practice





Policy and Advocacy

BIRD has contributed to different discussions about policy and other issues that affect rural areas using its evidence-based research findings as the basis for this work, including:

- » Production of 4 policy briefs
- » Developing a model on university-community engagement for sustainable and inclusive rural development; and BIRD staff chairs the university committee mandated, among others, to develop an action plan for university-community engagement, a framework which is intended to revamp the university's engagement with its stakeholders
- » Production of guidelines and videos on the use of evidence to inform policy and legislation by Parliamentarians

International Collaborations



BIRD increased its international profile through research partnerships and presentations at international conferences. The past year BIRD staff gave conference presentations and seminar presentations in USA, Canada and Cameroon.



The background of the slide is a photograph of a person's hands working on a desk. One hand is pointing at a line graph on a document, while the other is holding a pen. The desk is covered with various business documents, including one titled 'Summary Report' and another titled 'Business Report'. The entire image is overlaid with a semi-transparent green filter. A yellow line with a circle at the end points from the text '2021-2022' to the left.

OVERVIEW OF PROJECTS 2021-2022

Tables 1 and 2 provide an overview of projects/ grant proposals worked on by staff in 2021/2022.



Table 1: Research Grants, 2021 - 2022

SUCCESSFUL GRANTS				
Full Project Title	Funding Body	Date Commissioned	BIRD Contact Staff	Proposed funding
1. Assessing the impact of post-production infrastructure on women's economic empowerment and access to nutritious diet among female legume growers in northern Ghana	ICED	Nov., 2022	EOA; IB; BW; EFA; SEE	US\$ 70,000.00
2. Ex-post assessment of legislative strengthening programmes	USAID	Oct., 2022	PSM; AAA; EOA; TY	US\$ 100,000.00
3. Piloting of Agromovil App among Guinness Ghana's Supply Chain aggregators and farmers	USAID/METSS	Oct., 2022	PSM; TY; MA	US\$ 460,000.00
4. Meta Evaluation of USAID evaluations	USAID	Aug., 2022	PSM; AAA; EOA	US\$ 255,000.00
5. How Citizen Monitoring Can Save Public Money: The case of Northern Ghana	INTEGRITY ACTION/INTRAC /SEND	Mar., 2022	AAA	\$4000.00
6.				
7. The Impact of COVID-19 on Adolescent Girls' Sexual and Reproductive Health and Rights: A Mixed-Method Study	UNICEF	Feb., 2021	EOA	US\$ 9,800.00



Full Project Title	Funding Body	Date Commissioned	BIRD Contact Staff	Proposed funding
8. Assessment of drivers, access, barriers, and impact of digitalization on rural livelihood (RuTech Assessment)	GIZ	Dec., 2021	AAA, EOA, EFA	€60,000.00
9. Tools for Strengthening the Use of Evidence (TSUE)	USAID	Jul., 2021	PSM; AAA; EOA; TY	US\$ 500,000.00

PENDING GRANT APPLICATIONS

1. Locally-led Adaptation Metrics for Africa	IDRC	Sept., 2022	AAA	US\$100,000.00
2. Sustainable Elimination of Child Labor and Trafficking (SECLaT)	GFRA-USAID	May, 2022	EOA	US\$100,000.00
3. Towards improving the application of science and research in policy and management decisions for recovery of Ghana's small pelagic fisheries for sustainable socio-economic development	GFRA-USAID	May, 2022		US\$100,000.00
4. Promoting Equal Rights for Women and Girls with Disabilities in Ghana	PPAG	Apr., 2022	TY; EOA; AAA; MA	GHS274,018.00



Full Project Title	Funding Body	Date Submitted	BIRD Contact Staff	Proposed funding
5. Developing an Agricultural Financing Framework for Liberia	European Union	Mar., 2022	MA	US\$ 49,450.00
6. Pathways for improving Women empowerment across Nestle Cocoa Supply Chain in Ghana	Nestle	Feb., 2022	AAA	US\$ 22,000.00
7. Exploring the Viability of Index-based Insurance to build the Resilience of the Agricultural Value Chain Actors in Ghana	Regional Economic Growth Office (REGO)/ USAID through METSS	Nov.,2021	MA; PSM; AAA	US\$ 500,000.00

UNSUCCESSFUL GRANT APPLICATIONS

1. Changing climate, changing health: towards more resilient communities in Ghana	IDRC	Jul., 2022	EOA; BW; AAA; EFA; IB	CAD\$1,500,000.00
2. Promoting Rural Agricultural Health and Safety in Ghana (PRAHS)	Conservation, Health and Food Foundation	Jul., 2022	EOA; IB	US\$ 30,000.00
3. Adapting to Climate Change through Digital Technologies by Marginalized Smallholder Farmers in Ghana	IDRC and the UK's Foreign, Commonwealth and Development Office (FCDO)	Jun., 2022	MA	CAD\$500,000.00



Full Project Title	Funding Body	Date Submitted	BIRD Contact Staff	Proposed funding
4. Promoting Climate Smart integrated land use systems for livelihood resilience in the Semi-Arid zone of Ghana	GIZ	May, 2021	AAA	€ 5,000,000.00
5. Household Vulnerability Survey	WinRock	Apr., 2022	TY; EOA; AAA; MA	GH¢273,050.00
6. Enhanced Climate-resilient Water Resources Management	Danish International Development Agency (DANIDA)	Mar., 2022	AAA	DKK 1,000, 000
7. Climate change in Teaching and Education: A comprehensive study of policies and practices in Africa.	NFR	Feb., 2022	AAA	NOK 1,000,000.00
8. Awareness Creation of KNUST Gender Policy Towards Gender Transformative Change	Association of Commonwealth Universities (ACU)	Oct., 2021	MA	US\$ 10,000.00
9. Making Advances to Eliminate Child Labour in More Areas with Sustainable Integrated Efforts (MATE MASIE	WinRock	Aug., 2021	EOA; TY; AAA	GHS168,100.00

Notes on staff initials: AAA: Dr. Albert A. Arhin; EOA: Dr. Ebenezer Owusu-Addo; PSM: Prof. Paul Sarfo-Mensah; EFA: Prof. (Mrs.) Ernestina Fredua Antoh; SEE: Prof. Sampson Enyin Edusah; TY: Dr. Thomas Yeboah; MA: Dr. (Mrs.) Monica Addison; IB: Dr. Isaac Bonuedi; BW: Dr. (Mrs.) Bernice Wadei; NMO: Mr. Nathaniel Mensah-Odum.



Table 2: Commissioned Research Activities, 2021 - 2022

SUCCESSFUL COMMISSIONED RESEARCH UNDERTAKEN				
Full Project Title	Funding Body	Date Commissioned	BIRD Contact Staff	Proposed funding
1. Baseline study for Ghana Market Systems and Resilience Activity (MSR)	USIAD/ACDI/VOCA	Jul., 2022	EOA, PSM, IB, EFA, MA, TY, AAA	GHS 663,685.00
2. Performance Evaluation of the Sustainable Fisheries Management Project	USAID	Mar., 2022	EOA; AAA; PSM	GHS 403,979.80
3. Empowering Adolescent Girls through Improved Access to Reproductive Health Education and Rights-Based Quality Sexual and Reproductive Health Services in Ghana	UNFPA & UNICEF	May, 2021	EOA; AAA; TY; EFA;	GHS 460,372.50
4. Assessment of Child Labour Monitoring and Remediation Systems (CLMRS) In Cocoa Cooperatives and Facilitation of Cocoa Cooperatives' Self-Assessments	WinRock	Dec., 2021	EOA; TY	GHS 109,918.75



PENDING COMMISSIONED RESEARCH APPLICATIONS

Full Project Title	Funding Body	Date Submitted	BIRD Contact Staff	Proposed funding
1. Engagement of a Consultant to Conduct End-line Survey for GASIP	IFAD	Oct., 2022	EOA, MA, TY, IB	GHS 617,587.50
2. End of Project Evaluation of the Technical Education Development for Modernised Agriculture in Ghana (TEDMAG) Project	MOFA	Aug., 2022	TY, MA, PSM, EOA	GHS 491,895.00
3. Vulnerability Gap Assessment	UNICEF	Jul., 2022	EOA, TY, EFA	GHS 285,494.00
4. Review of Child Labour Eradication Framework	SOLIDARIDAD WEST AFRICA	Jul., 2022	TY; AAA	GHS 138,783.00
5. Design of medium-term strategic plan for NDA	Northern Development Authority	Jun., 2022	MA; EOA; IB; TY	GHS 423,818.75
6. Gender and Inclusion Advisor - Ghana National Plastic Action Partnership (GNPAP)	World Economic Forum/ Ministry of Environment, Science, Technology and Innovation in Ghana (MESTI).	Dec., 2021	MA	US\$20,000.00
7. Technical services and gender-equality advice to Global Affairs Canada (GAC)	Global Affairs Canada	Oct., 2021	MA	US\$20,000.00
8. Gender Responsive Skills Development	Global Affairs Canada	Aug., 2021	MA; EOA	GHS 318,500.00



Full Project Title	Funding Body	Date Submitted	BIRD Contact Staff	Proposed funding
9. Evaluation of Oxfam in Ghana COVID-19 Response and Influencing Strategy	OXFAM Ghana	Mar., 2021	MA; EOA; TY; AAA	GHS 231,662.50
10. Hygiene Behaviour Change Communication Campaign	Unilever-DFID HBCC	Mar., 2021	MA; EOA; TY	GHS137,353.80

UNSUCCESSFUL COMMISSIONED RESEARCH APPLICATIONS

1. Consulting services to conduct tracer study of micro and small enterprises supported by REP	Rural Enterprise Programme	Aug., 2022	SEE, EOA, IB, TY, EFA, MA	GHS 375,927.50
2. Provision of data collection and processing services for CARISCA	CARISCA	Apr., 2022	AAA; IB; TY; NMO	Discontinued by client

Notes on staff initials: AAA: Dr. Albert A. Arhin; EOA: Dr. Ebenezer Owusu-Addo; PSM: Prof. Paul Sarfo-Mensah; EFA: Prof. (Mrs.) Ernestina Fredua Antoh; SEE: Prof. Sampson Enyin Edusah; TY: Dr. Thomas Yeboah; MA: Dr. (Mrs.) Monica Addison; IB: Dr. Isaac Bonuedi; BW: Dr. (Mrs.) Bernice Wadei; NMO: Mr. Nathaniel Mensah-Odum.

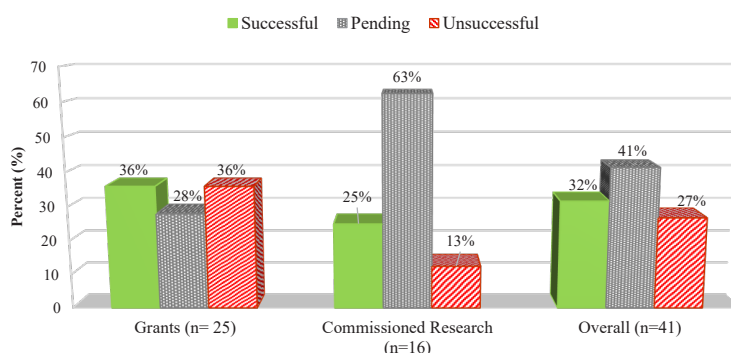


Fig. 1: The success rates of grants and commissioned research applications during 2021-2022





THE ENVIRONMENT AND SUSTAINABLE DEVELOPMENT UNIT (ENSUD)

The Environment and Sustainable Development Unit (EnSuD) is a multidisciplinary unit that exists to provide research, training, professional development, consultancy and advisory services, policy analysis and tools to individuals, corporate, governmental, or CSOs to contribute to good governance, safe, just, sustainable, socially inclusive and environmentally responsive development.

The EnSuD also aims to cultivate, undertake, facilitate, and produce multi-disciplinary, collaborative, and innovative research focused on sustainable environment, rural development, peri-urban sustainability, and social resilience. The Unit brings together scholars from multi-disciplinary backgrounds to critically inform research, public debate and seek solutions to pressing challenges posed by environmental and climate changes, urbanization, policy choices, hazards, and transboundary crises (e.g. epidemics). Project highlights for 2021-2022 include:

Assessment of drivers, access, barriers and impact of digitalization on rural livelihoods (RuTech Assessment)

The digital divide of rural and urban is a pressing global challenge, affecting progress on sustainable development. There is general recognition that digitalization is improving various aspects of livelihoods in rural areas. Yet, empirical research is generally limited in validating these claims. This research funded by GIZ aims to contribute to our understanding of the barriers, impacts, and challenges associated with the deep digital transformation processes that are occurring currently in the country, with a focus on rural communities. The study employed a concurrent mixed-method design. A total of 1835 participants comprising farmers (n=525), artisans and small and medium





enterprises (n=539), persons with disability (n=224), students (n=547), teachers (n=83) and health institutions (n=17) were selected across Ashanti, Central and Northern regions.

The findings show that a lot of rural residents are offline, and do not use apps and other digital services that could support their livelihoods. About 49% of the respondents indicated using mobile money while 33% indicated using the internet. Social media applications ever used by the respondents were WhatsApp (38%), Facebook (38%), email (17%), Tiktok (18%), Instagram (12%) and Telegram (8%). Digitalisation was perceived by the respondents to have a significant role in promoting employment and sustainable livelihoods in rural communities. Of the 17 health institutions surveyed, 35.3% (n=6) used electronic health records. Some health facilities were found to have created WhatsApp groups where senior medical officers offer advice and even provide 'live video' remote supportive services during delivery and other life-threatening situations. Other digital health domains such as telemedicine, augmented reality (AR), wearable devices and biosensors, and big data, virtual reality (VR), artificial intelligence (AI), and machine learning were not being used by health facilities. About 30% (n=391) of respondents indicated that digitalization has enabled them to search and have access to health information, enabled access to health providers and health services.

In terms of digitalization and education, the findings indicate that, the use of digital technology for communication, teaching and learning is low. For instance, only 34.9% of the teachers interviewed create digital resources to support their teaching

practice. About 23.2% of teachers integrate digital tools into their teaching; 10.8% of the teachers indicated ever using interactive digital tools and resources. Among students, 91% have ever used a digital device to access educational information within the past six months preceding the survey. 71% of students reported that using the internet, mobile phone services, and other digital technologies to support learning has impacted positively their learning and educational performance. The findings further show that digital exclusion is higher for women than men. About 73.3% of women had no skill at all in using tablet or computer, compared to 57% of males. Almost half of all women interviewed (46.1%) had no skill of operating a smartphone. Female farmers (73.3%) found it more difficult in navigating their way on mobile phones and internet than male farmers (64.3%). These findings point to the need to prioritise digital literacy and skills training in various areas of needs for farmers, SMEs and PWDs (bearing in mind affordability, attractiveness, content, formats, differentiated needs of participants, etc). It is hoped that the findings from the study will inform policy efforts, advocacy and measures aimed at advancing digitalisation to improve rural livelihoods and sustainable development. Key study findings have been shared with Ministry of Communication and Digitalisation, Ghana Investment Fund for Electronic Communications, GIZ and other partners.

Project Team: Dr Albert Arhin; Prof. (Mrs.) Ernestina Fredua Antoh; Dr. Ebenezer Owusu-Addo; Dr. Isaac Bonuedi; Dr. (Mrs.) Bernice Wadei; Dr Thomas Yeboah; Prof. Sampson Enyin Edusah; Dr (Mrs.) Monica Addison; Mr. Nathaniel Mensah-Odum.



Landscape Planning and Governance of Greater Kumasi: Ongoing

A number of studies on spatial dynamics of land use change have shown declining levels of green spaces and water infrastructure and excessive pressure on these resources threatens sustainability and achieving the 2030 Sustainable Development Goals (SDGs) on food, water, climate and biodiversity. This changing nature of the Kumasi landscape raises important questions. For example, as the world strive to achieve the SDGs, what would the Greater Kumasi Metropolitan Area (GKMA) look like in 2030? Why and how should green and blue infrastructure of the GKMA be conserved? What strategies will work and how should different stakeholders collaborate to conserve green and blue infrastructure? These are important questions that require multi-actor and multi-stakeholder forum to explore the challenges and strategies for inclusive development planning in the Kumasi landscape. This project, which started in 2021, was intended to map out different stakeholders and interests operating in the fields of (peri-) urban planning, agriculture, forestry and conservation in the Kumasi landscape. The goal was to identify strategies and shared stakeholder ambitions for the Kumasi landscape, which will be translated into visualised future development narratives and scenarios, in relation to the Sustainable Development Goals for food, water, climate and biodiversity by the year 2030. The project is being implemented in partnership with PBL Netherlands Environmental Assessment Agency. A key finding of the study was that the GKMA is experiencing massive population growth and the outer rings (peri-urban areas) have seen increased demand for land for various development

activities. This has significantly reduced opportunities for local people to sustain their livelihoods resulting in increased despondency, especially among the youth who have little or no skills to compete for jobs outside agriculture. Environmental degradation has become a major challenge in the area; riverine areas, wetlands and the few remaining forest patches have all come under serious threat. The study recommended an inter-sectorial collaboration to develop shared and implementable scenarios that can tackle joblessness, increased crime rate, and environmental degradation in the GKMA

Project Team: Prof. Paul Sarfo-Mensah; Dr. Albert Arhin. Nathaniel Odum, and Johan Meijer and Like Bijlsma of PBL, The Netherlands Environmental Development Agency

Exploratory study of the cashew value chain in the transitional agro-ecological zone of Ghana

This exploratory study on cashew in some selected communities in the transitional ecological zone of Ghana focuses on understanding the cashew farming systems, impacts from changing climate on production, generational and gender livelihood opportunities and value chain for socio-economic development. During this year under review, the research team undertook a participatory rapid rural appraisal (PRRP) in the Kintampo North Municipal Area as the first of a series of mixed methods approaches and activities that will drive this research and development activity. The purpose of the PRRA was to affirm preliminary thoughts on the study objectives and research questions which



have been derived from an extensive desk study. The pilot phase of the project is being funded by BIRD.

Project Team: Prof. Paul Sarfo-Mensah; Dr. Thomas Yeboah; Prof. (Mrs.) Ernestina Fredua Antoh; Dr. (Mrs.) Bernice Wadei; Dr. Albert A. Arhin; Dr. Isaac Bonuedi

Locally-led adaptation strategies, lessons and pathways

The changing nature of Ghana's climate and their effects on livelihoods, health, food security and economic development have been well documented. This new study seeks to shed light on different lessons and pathways through which locally-led adaptation can support Ghana's climate actions. The study is being conducted in preparation for possible funding from CLARE call and other collaborative opportunities being sought from Africa Policy Research Institute. In 2022, initial literature and policy and stakeholder mapping of climate change policies, strategies and actions were undertaken. It is anticipated that further work will be carried out in 2023.

Project Team: Dr Albert Arhin

Pathways for Cocoa sustainability

This project started in 2019, is documenting key policy, and operational and practical changes occurring in the cocoa sector. The study also engages cocoa farmers to understand changes in their livelihoods over time, including changes in environmental conditions on production, income and production levels, membership of

associations, labour conditions, the extent of benefits from cocoa productivity enhancement programs such as mass spraying, fertiliser subsidy, hand pollination, and participation in sustainability programmes being implemented by cocoa and chocolate companies. In 2022, the study begun to document debates and analysis of the Living Income concept. The empirical part of engaging cocoa farmers to understand income trends and pathways for strengthening income from cocoa shall be undertaken in 2023.

Project Team: Dr Albert Arhin

How Citizen Monitoring Can Save Public Money: The case of Northern Ghana

Citizen engagement is promoted as a means of achieving a range of development and governance goals, including improving the performance of services and public infrastructure projects. Ghana has a high rate of uncompleted public projects that often leads to losses to the state. To test the extent to which citizen monitoring contributes to positive development outcomes in Ghana, this research is working with other staff from the Department of Land Economy and Construction Management to explore the extent to which trained community citizen monitors who have been monitoring infrastructure projects for nearly a year in 5 districts in Ghana have made any difference in shaping the quality and fixing of problems related to those infrastructural projects. The study districts are Tamale, West Gonja, Savelugu Yendi, and Tolon Districts. The aim of the research is to gather evidence on the extent to which citizen monitoring



of projects— and associated investments— contribute to public savings and better value of money. The fieldwork component of this work is supported by Integrity Action and INTRAC in collaboration with SEND Ghana.

Project Team: Dr Kenneth Donkor Hyiaman (Department of Land Economy,

KNUST), Dr. Michael Nii Addy (Department of Construction Technology and Management, KNUST), Dr Albert Arhin (BIRD) and Catherine Allen (INTRAC, UK).

GENDER AND LIVELIHOOD UNIT



Gender and livelihoods are key areas for understanding how gender operates in limiting or expanding men and women's access, options and choices regarding the use of resources and their material conditions, and ultimately their ability to voice concerns and influence their positions in life. Gender and Livelihood Unit under BIRD focuses on the gendered aspects, dimensions and gender impact on rural livelihoods in Ghana and beyond. The unit engages in multidisciplinary contract research, consultancy services and human resource development that aim at promoting inclusive growth and development. The main objective of the unit is to achieve research excellence aiming to provide rigorous, evidence-based advice to inform policy about matters relating to gender and livelihood to address pressing gender and livelihood challenges facing men, women, girls, boys and gender-diverse people in rural and peri-urban areas of Ghana. Project highlights for 2021-2022 include:

The Infrastructure's Impact on Nutritious Diets, Women Empowerment and Gender Equality (IINDWEGE) – Ongoing

The Infrastructure's Impact on Nutritious Diets, Women Empowerment and Gender Equality (IINDWEGE) Project is a one-year small grant awarded to BIRD by the International Centre for Evaluation and Development (ICED) with funding from the Bill and Melinda Gates Foundation (BMGF). Within this broader project, the BIRD research team is undertaking a study dubbed "*Assessing the impact of post-production infrastructure on women's economic empowerment and access to nutritious diets among female legume growers in Northern Ghana*". This research project seeks to analyse





the effects of processing infrastructures on access to nutritious diets and economic empowerment among women in legume production in Northern Ghana. Fostering legume production (mainly cultivated by women) and processing in Northern Ghana offers an enormous opportunity to accelerate progress towards achieving the SDGs of zero hunger, gender equality and decent employment in a relatively underdeveloped region characterized by high levels of poverty, malnutrition, inequality, and marginalization of women. The project uses a quasi-experimental research design to map out the specific processing facilities along the legume value chain in northern Ghana and analyse their nutrition-sensitive and gender-inclusive effects. The objectives of the study are to explore whether certain components of post-production infrastructure are more nutrition-sensitive by investigating the differential effects of traditional and improved processing technologies; analyse the transmission pathways through which processing infrastructure could affect nutritional outcomes; and provide policy recommendations based on the key findings, with the goal of helping the relevant stakeholders to identify and invest in the most impactful types of agro-processing infrastructure. The study protocols and data collection instruments have been developed. Ethics approval is currently being sought from an appropriate ethics body. The fieldwork is scheduled for January 2023.

Project Team: Dr. Ebenezer Owusu-Addo, Dr. Bernice Wadei, Dr. Isaac Bonuedi, Prof. (Mrs.) Enerstina Fredua Antoh; Prof. Sampson Enyin Edusah

SOCIAL CHANGE AND DEVELOPMENT UNIT (SOCDU)

The Social Change and Development (SCD) unit at BIRD seeks to enhance high-quality research, capacity building, and consultancy services to improve well-being of people and transform communities, both local and global. The unit has a team of skilled researchers and academics with varied expertise and several years of experience in both qualitative and quantitative research methodology. The Unit focuses on conducting high quality research, training services and consultancies in areas such as education, migration, microfinance, health and rural poverty.

This year our work has focused on research on various social issues including the impact of COVID-19 on street youth, child labour, health, women empowerment among others. Project highlights for 2021-2022 include:

The Impact of COVID-19 on Adolescent Girls' Sexual and Reproductive Health and Rights: A Mixed-Method Study

One of the important and necessary socio-economic strategies adopted by governments globally to contain the spread of the COVID-19 pandemic is school closures. In Ghana,



schools were closed due to the outbreak of COVID-19 between March and December 2020. This project funded by UNICEF aimed to understand the impact of COVID-19 induced school closures on adolescent sexual and reproductive health and rights. Specifically, the study sought to examine the effects of COVID-19 induced school closures on the incidence of child sexual abuse, adolescent pregnancy, child marriage and adolescent girls' use of sexual and reproductive health services. The study employed a concurrent mixed-method design. The sample comprised 853 adolescent girls aged 13-19 (16.03 ± 2.04 years) in Ghana.

The findings indicate that the prevalence of teenage pregnancy during the COVID-19 lockdown and school closures in the sampled adolescent girls was 7%. About 20.8% of the adolescent girls (N= 177) reported that child marriage was discussed with them during the COVID-19 lockdown and school closures. Of this figure, 3.4% got married (N=29) while 17.4% did not get married (N=148). Overall, the prevalence of child sexual abuse (CSA) during the COVID-19 lockdown and school closures was 32.5%. Protective factors for CSA identified in this study were feeling safe in neighbourhood and parents often listen to opinions. Risk factors for CSA were physical activity, parents sometimes listen to opinions, living with another relative, having no disability and having a close relationship with parents.

Generally, the findings show that girls in the study districts were highly exposed to vulnerabilities in terms of sexual exploitation and the risk of child marriage. The school closures did not only interrupt educational progress; they also curtailed normal social interaction and limited access of adolescent girls to essential services that they relied on, including school health programmes. These are important effects of

Impact of COVID-19 on adolescent girls SRHRs



Teenage Pregnancy



Exposure to sexual violence and abuse



Child Marriage



School Dropout



Contraception

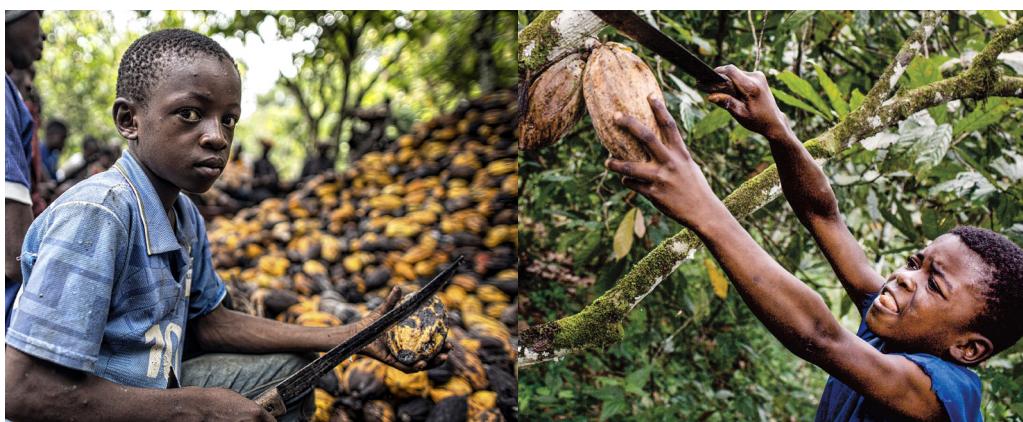


school closures, in addition to increases in adolescent pregnancies, sexual abuse and discussions on child marriage. For most of the adolescent girls interviewed, schools serve as safe places, which keep them away from early pregnancies and exposure to sexual violence. The key strategies for mitigating the effects of COVID-19 on adolescent girls SRHRs that emerged from the study are parent-girl-child interventions, community-based interventions, internet/social media public health campaigns and maintaining learning and links to schools during closures. Both the quantitative and qualitative evidence indicate that parent-adolescent sexual communication is one factor that could help mitigate the negative impact of pandemics on adolescent girls' SRHRs. For instance, parents can provide information on safer sex behaviour, use of contraceptives and pregnancy care. It is anticipated that the findings from this study will be used to inform child protection and public health and education policies and programming relating to mitigating the effects of school closures on adolescent girls' SRHR during pandemics.

Project team: Dr. Ebenezer Owusu-Addo (BIRD), Nathaniel Mensah-Odum (BIRD), Sally Baaba Owusu-Addo (Ghana Health Service), Avantee Bansal (UNICEF), Dr. Antoine Deliege (UNICEF), Miho Yoshikawa (UNICEF).

An Assessment of Child Labour Monitoring and Remediation Systems (CLMRS) in Three Selected Cocoa Cooperatives in Ashanti Region

The Making Advances to Eliminate Child Labour in More Areas with Sustainable Integrated Efforts (MATE MASIE) project is a four-year programme being implemented by Winrock International with funding from the United States Department of Labour (USDOL). The goal of the project is to strengthen the capacity, connections and accountability across child labour enforcement and monitoring within cocoa cooperatives in Ghana. As part of the measures to strengthen the capacity of cooperatives to better engage highly vulnerable households directly and by linking their members to service providers, WI commissioned BIRD to conduct this study. The aim of the study was to assess the past and present Child Labour Monitoring and Remediation Systems (CLMRS) including their structures and processes being implemented



by three cooperatives (i.e., Kuapa Kooko, Kooko Pa and Offinso Fine Flavor) in Ashanti Region, and to identify barriers to the cooperatives' ability to maintain effective CLMRS, and recommend suitable and cost efficient CLMRS for the cooperatives. Using the OECD criteria, the study also assessed the impacts, effectiveness, efficiency, coherence and sustainability of the CLMRS of the three cooperatives. Data for this study were obtained through a review of existing CLMRS, national and other relevant documents, as well as qualitative interviews conducted with staff of the three cooperatives, Community Child Protection Committee (CCPC) members and selected actors with knowledge and experience in implementing CLMRS in the cocoa sector of Ghana.

The study found that while the CLMRS used by the co-operatives had high relevance, there is low coherence. While they all focused on combating child labour, their coherence with national child labour efforts needs significant improvement. Nevertheless, the relevance of the CLMRS implemented by the co-operatives was rated as high. On the issue of efficiency, while we found no information on the actual costs involved in

implementing CLMRS by three co-operatives, a multi-sectoral approach to CLMRS design and implementation is key to achieving efficiency. One way to reduce monitoring cost is to make use of local level structures such as the CCPCs.

Key gaps in the CLMRS of the three co-operatives include: lack of strong partnership with local government departments, Civil Society Organisations (CSO) and other community-based organizations, lack of on-farm monitoring, limited scope of remediation/support services, non-integration of the CLMRS data into the national GCLMS framework, lack of a well-structured referral system, absence of terms of reference for CCPC members on their duties and responsibilities and sustainability strategy post-CLMRS implementation. On the operation front, key gaps identified were lack of documentation of the CLMRS structures, approaches, processes, and impact. A proposed cost-efficient CLMRS was outlined based on these identified gaps, and recommendations were made for the MATE MASIE project in supporting the cooperatives to implement the proposed cost-efficient CLMRS.



A cross-section of participants at the CLMRS dissemination workshop



On 30th August 2021 BIRD facilitated a workshop to disseminate the findings of the assessment of the past and current CLMRS structures and processes of three cocoa cooperatives selected for the MATE MASIE project. The overall purpose of the assessment was to conduct an analysis and identify gaps of existing CLMRSs, suggest areas for harmonization or integration into Public Private Partnership (PPP) “children first in cocoa” Ghana Child Labour Monitoring System (GCLMS). The outcome of the assessment is expected to feed into the design and piloting by the cooperatives a cost efficient CLMRS and traceability systems as part of the MATE MASIE project. The workshop was attended by a wide range of stakeholders drawn from government, private sector, CSO/NGO, cooperative members, child labour experts, and academic actors.

Project Team: Dr. Ebenezer Owusu-Addo, Dr. Thomas Yeboah, Mr. Nathaniel Mensah-Odum, Dr. Albert Arhin.

Assessing the Impact of the National Health Insurance Scheme on Out-of-Pocket Expenditure in Three Selected Districts in the Ashanti Region, Ghana: *completed*

The provision of quality healthcare has been acknowledged by the United Nations Sustainable Development Goals (SDGs-3) which aims at ensuring healthy lives and promoting well-being for all of all ages. This study sought to assess the impact NHIS on

out-of-pocket-expenditures (OOPEs). The study was geographically centered on three (3) districts in the Ashanti region namely Kumasi Metropolis, Ejisu Municipal and Bosomtwi District Assemblies. Preliminary findings show that the NHIS has been instrumental in reducing expenditure on healthcare access among beneficiaries. Individuals who have subscribed to the scheme are able to access prompt healthcare although challenges including prolonged waiting time at health facilities and sometimes unavailability of prescribed drugs impact on utilisation of the scheme by beneficiaries. This research was funded by BIRD.

Project Team: Prof. Ernestina Fredua Antoh, Dr. Thomas Yeboah, Mr. Nathaniel Mensah-Odum.

Street Youth COVID-19 research: *ongoing*

Beyond the popular conceptualisation of street youth as vulnerable, research in South Africa highlight how street youth negotiate resilient trajectories strengthened often by personal resources, religiosity and the bond of association with peer groups to cope with multiple livelihoods and other challenges connected with streetism. However, we might expect that the COVID-19 pandemic and its inspired legislations of restrictions on movement and lockdown would have implications on the livelihoods, lives and the futures that street youth imagine for themselves. As social actors whose agency have recognised, it is possible that street youth might develop some tactics and strategies (including drawing on their social networks) to navigate the crisis and advance their lives and futures in advantageous ways. Nevertheless, there are notably a handful



studies that have examined issues of how covid-19 is impacting on the lives and livelihoods of street youth and the coping or navigation strategies employed. This present study aims to fill this gap by bringing new data and insight from qualitative research with street youth in Ghana. The Social Change unit at BIRD embarked on research which sought to understand how COVID-19 has impacted the lives, livelihoods and imagined futures of street youth and their coping strategies in the city of Kumasi. The research involved primary data collection with 70 youth engaged in various economic activities on the principal streets of Kumasi. Data collection is completed, and a draft report and two publications are currently being worked on. The preliminary findings show that while COVID-19 has led to destruction of the livelihoods of street youth, the support provided from close friends, family members and other networks have been instrumental in enabling street youth to cope with the challenges brought about by the pandemic. Street youth use their agency to navigate the challenges encountered during covid-19. This project was funded by BIRD.

Project Team: Prof Ernestina Fredua Antoh, Dr. Thomas Yeboah, Nathaniel Mensah-Odum.



A tractor with no rollover protection

Agricultural Health and Safety in Rural Ghana: ongoing

Globally, agriculture is identified as one of the most hazardous industries. In spite of this, the missing link in agricultural policies and interventions in Ghana has always been a lack of complementary programme that specifically addresses the health and safety needs of the agricultural workforce in remote and rural areas. As a research centre with a focus on rural development, BIRD is concerned about the health risks and hazards that farmers and farmworkers are exposed to, and is currently conducting research in this space to inform agricultural health and safety policies and interventions in Ghana. In the year under review, a pilot study was conducted on agricultural health and safety in farming populations. The objectives of the study are to:

1. Identify and track health indicators among farming populations to inform occupational health and safety policies within the agricultural sector, and
2. Determine the proportion of farming enterprises from different commodity



Farmer applying pesticides with no PPE



sectors that have set in place health and safety systems, and examine how these enterprises control high-risk hazards

The preliminary findings indicate that farmers have a high exposure to farm chemicals, such as pesticides and fertilizers, as well as toxic gases produced from common farm practices like manure decomposition and silo crop storage. Farmers also have exposure to high levels of dust, which contain mould, bacteria, and animal droppings, among other things. Tractor operators interviewed reported high exposure to loud noises and sounds from tractors, and complained of hearing problems, back pains and injuries associated with tractor rollover. The study found that none of the tractors used by the farmers had a rollover protection.

Farmers reported physical health problems including hypertension, diabetes, and musculoskeletal injuries. Farmers also reported behavioural and mental health issues such as anxiety, depression, substance use (alcohol and smoking), and death by suicide. This project is being implemented with seed funding from BIRD. In the next steps, a grant proposal will be developed to seek for an external funding to scale up the study. The findings from the study will be used to develop an integrated, theory-driven and multi-sectoral intervention focusing on farmer health and safety. The overall goal of the Project will be to improve the health, well-being and safety of farm families for increased productivity, food security and sustainable agriculture in rural Ghana.

Project Team: Dr. Ebenezer Owusu-Addo, Nathaniel Mensah-Odum, Dr. Isaac Bonuedi, Dr. Thomas, Yeboah, Dr. Albert Arhin, Dr. Bernice Wadei, Dr. Monica Addison, Prof. Ernestina Fedcua Antoh, Prof. Paul Sarfo-Mensah, Prof. S.E. Edusah



MONITORING, EVALUATION & DEVELOPMENT UNIT (MED)

The MED unit is a multidisciplinary unit that aims to promote development effectiveness and inclusive growth through the production of rigorous, high-quality and independent evaluation and research evidence that meet the highest standards of quantitative and qualitative analysis. The Unit is staffed by a team of experienced evaluators and researchers who bring a broad range of expertise from agriculture, health, education, housing, climate change, labour markets, microfinance, and rural development among others.

This year, our work has focused on conducting baseline surveys, performance evaluations and research on COVID-19 and other critical issues of national concern. Our team has also been active in “knowledge translation”, presenting training, and workshops on realist review. The Unit also organised a short course in Systematic Reviews. Project highlights for 2021-2022 include:



Empowering Adolescent Girls through Access to Reproductive Health Education and Rights-Based Quality Sexual and Reproductive Health Services in Ghana

In January 2018, UNFPA and UNICEF launched a programme on strengthening sexual and reproductive health and rights of young people through scaling up of reproductive health education in Ghana supported by Global Affairs Canada. The joint programme entitled *“Empowering Adolescent Girls through Improved Access to Reproductive Health Education and Rights-Based Quality Sexual and Reproductive Health Services in Ghana”* targets as primary beneficiaries, adolescent girls 10-19 years in and out of school, married and unmarried. The secondary beneficiaries are girls aged 20-24 years. Special attention is given to vulnerable girls such as Kayayei (migrant girls) and those living with disabilities including those in humanitarian situations (refugee camps). UNFPA and UNICEF commissioned BIRD to conduct a mid-term performance evaluation of the project. The overall objective of the evaluation was to provide evidence of programme performance and achievement of planned results, provide accountability to stakeholders and provide lessons learned to inform the development of future related programmes.

The evaluation found that the programme has reached a total of 219,192 adolescents and young people with relevant educational materials on sexual and reproductive health (SRH). Further, 34200 adolescent girls accessed family planning services compared

to the baseline figure of 15063. One way that the UNJP made significant gains in terms of adolescent agency is through the accumulation of knowledge on SHR. Aside from accumulation of knowledge, other areas that the programme made modest gains include adolescents’ confidence to say no to sex, negotiate safe sex and refuse child marriage. The interviews and focus groups with the adolescents revealed that they were now assertive and demonstrated knowledge in countering gender stereotypes and accessing SHR services.



The findings from the evaluation indicate that parents especially mothers are primary source of information to adolescents and young people when it comes to sexual and reproductive health issues. It is recommended that a Parent Education Programme be incorporated into the programme suite of activities to improve parents’ skills for educating and communicating with



adolescents and young people, especially about sexuality and reproductive health. The proposed parent education programme will be most effective when it operates holistically within the socio-cultural context of changing family patterns and works through existing networks of learning institutions and community-based organizations. The evaluation further recommended that to effectively empower adolescents against transactional and risky sex behaviours, there is the need to consider supporting economic empowerment interventions targeting adolescents. This may be through direct initiatives such as gender-responsive cash plus transfer programmes or indirect initiatives such as skills for employability and programmes with peer mentors on future planning. There is strong evidence that cash transfer programmes significantly reduce sexual debut, transactional sex, early marriage, and adolescent pregnancy among adolescents.

Evaluation Team: Dr. Ebenezer Owusu-Addo, Prof. Ernestina Fredua Antoh, Dr. Albert Arhin, Dr. Thomas Yeboah, Mr. Nathaniel Mensah-Odum, Dr. Adom Manu and Prof. Rudith King.

Performance Evaluation of Sustainable Fisheries Management Project (SFMP)

SFMP was designed to support the Feed the Future strategy through the 2013–2019. It was granted an initial no-cost extension for November 1, 2019–September 31, 2020, and a second costed extension in May 2020 through April 30, 2021, during the COVID-19 pandemic. USAID Ghana commissioned BIRD to undertake the final performance evaluation of the SFMP.

The purpose of this performance evaluation was to determine the extent to which the USAID Ghana SFMP components and/or interventions have been successfully implemented and to confirm progress made toward achieving its intended goal to rebuild targeted fish stocks through the adoption of sustainable practices and exploitation levels. A mixed-method approach was used for the evaluation; a total of 500 fisherfolk were surveyed in addition to interviews with key informants (86) in the four coastal regions.



The evaluation found that SFMP positively impacted efforts to rebuild the small pelagic fisheries of the Ghanaian marine waters. Awareness creation is a precondition for addressing issues impacting the fisheries, especially in situations where illegal unreported and unregulated (IUU) has been going on for a considerable period. Over the period of engagement, SFMP saw the implementation of three closed fishing periods for commercial trawlers in November



2016, February 2017, and January–February 2018. For the marine artisanal canoe fishery, the first seasonal closure was May 15–June 15, 2019. While the timing of the 2019 closed season for the artisanal sector lacked a scientific basis, this has subsequently been corrected with the declaration of the next closed season for July 2021. The evaluation found that stakeholder engagements and participation in decision-making processes contributed to providing fisherfolk a voice in policy issues. It also raised fisherfolk's expectations for their voice to be heard, which changed the attitude of the FC about the value of hearing them. Evidence gathered from the evaluation indicates that the 6-month economic safety net project (cash transfers) contributed to building household resilience against the shocks engendered by COVID-19. Recurrent themes across the interviews and FGDs were improved nutrition, improved emotional and mental health, household resilience, and diversified livelihoods.

The findings of the evaluation would inform decisions about future programming, as it will assist USAID/Ghana, its implementing partners, and other relevant stakeholders with guidance to optimize the effectiveness

of future programming in Ghana's marine fisheries sector.

Evaluation Team: Dr. Ebenezer Owusu-Addo, Prof. Stephen Amisah, Prof. Paul Sarfo-Mensah, Dr. Albert Arhin, Dr. Thomas Yeboah, Dr. Yaw Amo Sarpong, Mr. Nathaniel Mensah-Odum.

Feed the Future Market Systems and Resilience Activity Baseline Survey

The Feed the Future Ghana Market Systems and Resilience Activity (MSR), funded by USAID, is implemented by ACDI/VOCA and partners in 17 districts in northern Ghana, covering the Northern, North East, Upper East, and Upper West Regions of the Feed the Future (FtF) northern Ghana Zone of Influence. ACDI/VOCA commissioned BIRD to conduct a baseline survey for the MSR Activity. The purpose of the baseline study was to obtain information to test the MSR Activity's causal pathway as outlined in its Theory of Change, confirm the targets of key indicators and lay the groundwork for impact evaluation of the project.



Emerging technology (Moisture meter) being used by SHFs



Groundnut sheller



The study used mixed method quasi-experimental design involving the collection and analysis of quantitative and qualitative data as well synthesis of both grey and academic literature. Data were collected through a well-structured questionnaire, which was administered to 1763 small-holder farmers (MSR districts, N=1182; non-MSR districts, N=581) engaged in the production of the six targeted crops (maize, soya, cowpea, groundnuts, vegetables, and shea). The findings indicate that vegetables are the most profitable crops cultivated in the ZOI with the highest gross margin of \$522.00 per hectare. It is followed by soya (\$482.00), cowpea (\$ 404.00), groundnut (\$321.00), maize (\$ 262.00), and shea (\$ 52.9). Overall, the study concluded that there is tremendous potential to *increase commercialization and*

profitability of agriculture markets in the ZOI, and that the OBs, their nucleus farmers and the numerous SHFs could serve as key drivers of the process. The reasoning behind this is that they are the market actors that have a comparatively better appreciation of the market systems and the resilience of the six targeted commodities of the MSR activity, and there is the need to capitalize on it by the project. The MSR Activity will significantly benefit from the findings in this baseline study if they are integrated into intervention planning at an early stage.

Evaluation Team: Dr. Ebenezer Owusu-Addo, Prof. Paul Sarfo-Mensah, Dr. Isaac Bonuedi, Dr. Thomas Yeboah, Monica Addison, Dr. Albert Arhin, Prof. Ernestina Fredua Antoh, Dr. Mr. Nathaniel Mensah-Odum.

UNIVERSITY- COMMUNITY ENGAGEMENT



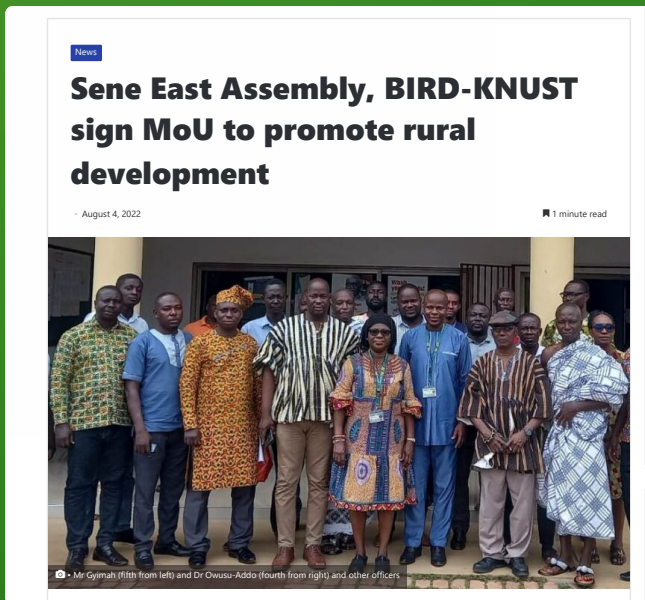
In the year under review, the department initiated a University-Community Engagement Initiative focusing on sustainable and inclusive rural development. Noting the evolving development needs and challenges of the District Assemblies in Ghana and the knowledge and expertise that could be provided by BIRD, KNUST on education, research and capacity building, a Memorandum of Understanding (MoU) was

signed with two districts (Sene East and Sekyere Afram Plains). The purpose of the MoU is to establish a general framework to promote collaboration between the parties in matters of common interest in pursuance of sustainable and inclusive development in the participating districts through a university-community engagement model. The model covers six areas as shown in Figure 1. The MoU is for a period of five (5) years.





Figure 1: University- Community Engagement Model.



Media coverage of the signing of the MoU, Ghanaian Times, August 4, 2022





Signing of MoU with District Assemblies



Engagement with Students during University-Community Engagement visits



Grant Proposal Writing Workshop for District Assemblies

In line with the MoU signed with the districts, a one-day capacity building workshop on grant proposal writing was organized for the Sene East District on November 29, 2022 at Kajaji. A total of 25 participants took part in the training workshop comprising Unit Heads of the District Assembly, representatives from the District Health Directorate, District Directorate of Agriculture, District Directorate of Education, NCCE, Department of Social Welfare and Community Development, the Traditional Council, and Assembly Members.

Participants were taken through the various stages of proposal development, from Overview of Grants to Concept Note and Proposal Writing; Identifying relevant calls and Funders; Problem Statement, Goals

and Objectives; Implementation Plan/ Method; Financial proposal/Budget; Project Evaluation; Sustainability and Mainstreaming gender into grant proposals. The workshop was facilitated by staff from BIRD including the Director, Dr. Ebenezer Owusu-Addo, Prof. Paul Sarfo-Mensah and Prof. Ernestina Fredua Antoh.

Participants at the workshop identified increased teenage pregnancy and child marriage as some of the critical social problems facing the district that need urgent attention. In view of this, as part of the next steps, it was resolved that BIRD and the district would develop a joint grant proposal that comprehensively and holistically addresses teenage pregnancy and child marriage in the district. All the decentralized departments and the district assembly were tasked to draft grant proposals to seek for funding with technical support and input from BIRD.

**News**

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BIRD organises proposal writing training for Sene East District

FROM EMMANUEL ADU
GYAMFI, KAJAJI

THE Bureau of Integrated Rural Development (BIRD) of Kwame Nkrumah University of Science and Technology (KNUST) on Thursday organised a day's capacity building workshop on grant proposal writing for Sene East District at Kajaji in the Bono East Region.

The workshop was aimed at strengthening the capacity of the district assembly and the decentralized departments and agencies to learn grant proposal skills to enable them seek funding to address prioritised needs of the district.

It was attended by unit heads of the district assembly, representatives from the District Health Directorate, Department of Agriculture, education, Department of Social Welfare, traditional council, and assembly members among others.

Participants were taken through stages of proposal development namely: overview of grants, concept note, identifying relevant calls and funders, problem statement, goals and objectives, implementation plan, financial proposal, evaluation and sustainability.

Dr Ebenezer Owusu-Addo, the Director of BIRD, KNUST, and strengthening the institutional capacity of the district assembly and other development actors was outlined in a Memorandum of Understanding (MoU) signed with the district on July 2022.

He indicated that through the workshop, participants had gained enhanced knowledge and capacity in grant proposal writing, which has placed them in a better position to seek for funds and networking.

The director stated that the university-community engagement towards sustainable and inclusive rural development would ensure the steady institutional and infrastructural growth of Sene East District.

Dr Owusu-Addo disclosed that the workshop identified high rate of teenage pregnancy and child marriages as some of the critical social challenges in the district which needed urgent attention.

"It was resolved that BIRD, KNUST and Sene East District will develop a joint grant proposal to address the challenges. All the decentralized departments were charged to draft grant proposals to seek funding and technical support," he added.

The Sene East District Co-ordinating Director, Mr Fatah Saadome Kankam, noted that the workshop would enhance their capacity in grant writing to enable them write winnable proposals for developmental projects.

He thanked BIRD-KNUST for kick-starting the operationalisation of the MoU by building their capacities, saying that the university-community engagement will be a game changer for the district's development agenda.

Mr Kankam assured the commitment of the Sene East Assembly and the decentralized departments and agencies to work tirelessly on the assigned task of drafting their respective grant proposals.



Participants after the workshop

Media coverage of the Grant Proposal Writing Workshop



POLICY AND ADVOCACY

In the year under review, four policy briefs were produced covering the following topics:

- © Prevalence and determinants of child marriage during the COVID-19 lockdown and school closures: evidence from Ghana
- © Prevalence and correlates of sexual abuse among adolescent girls during the COVID-19 lockdown and school closures: evidence from Ghana
- © Leveraging the power of digitalization to improve rural development: Challenges and Opportunities
- © Social protection and the urgent need for expanded cash transfers in Africa: Challenges and the way forward



EDUCATION & TRAINING

Development of an MSc/MPhil Programme in Inclusive Market Development (IMD)

In August 2022, BIRD commenced work on the development of a new postgraduate programme in Inclusive Market Development (IMD). This programme is a collaborative effort between BIRD and the Wageningen Centre for Development Innovation (WCDI) of Wageningen University and Research (WUR), The Netherlands. Mr Jan Helder, a Sr. Economist and Marketing and Value Chain Development Expert from the WCDI, WUR was on sabbatical with BIRD between August 24 and September 30, 2022 to assist in the programme development. To date, the course content has been developed. Stakeholders' meeting was held on the draft course content in September 28, 2022. The programme will be rolled out in the 2023/2024 academic year.



Short Course in Systematic Reviews

BIRD conducted a short course in Systematic Reviews. This course aimed to introduce participants to the methodology of systematic reviews. Participants were exposed to the various stages involved in conducting a systematic review and had the opportunity to gain practical experience of the tasks involved at mini workshops. The course was organised from October 24 to 27,

2022 at the IDL Conference Centre, KNUST. The number of participants was 45. The participants comprised Commissioners of Research/Evaluation and Evidence Syntheses, Public Health Specialists, Development Specialists, Clinicians, Researchers, Lecturers, Postgraduate Students, and other professionals.

Lead Facilitators: Dr. Ebenezer Owusu-Addo, Dr. Bruce Lamptey (Assistant Librarian, KNUST), Prof. Vivian Welch (University of Ottawa and Editor in Chief of the Campbell Collaboration).



Participants at the short course

Teaching/ Supervision of Students Project Work/Thesis

Because BIRD is a research department, the academic staff of BIRD continued to dedicate about 30% of their time to teaching and supervision of students' project works in various departments within the University. These include the Faculty of Agriculture and Faculty of Renewable Natural Resources of the College of Agriculture and Natural Resources, Department of Geography

and Rural Development of the College of Humanities and Social Sciences, Department of Planning, College of Art and Built Environment, and Department of Health Promotion and Education, School of Public Health. The academic staff also continued to serve as External and Internal Examiners for institutions such as the Institute of Development Studies (IDS), University of Cape Coast, University of Energy and Natural Resources (UENR), Centre for Sustainable Development (CESDEV) at the University of Ibadan, Nigeria, University of Cape Town, South Africa and graduate students within CANR and other Colleges of the University.



The Young Consultant Development Programme (YCDP)

In the year under review, BIRD instituted the YCDP, which seeks to introduce graduates who are early professionals, with an interest or qualification in development to research-driven consulting in the rural and international development sectors. The programme aligns with the Vice-Chancellor's vision of entrepreneurship training and is geared towards promoting research-based and consulting entrepreneurship. Recent graduates (MSc., MPhil or PhD) are the persons this programme seeks to target. The programme offers graduates/early-career professionals the opportunity to develop and refine their technical skills and provide experiences across the key thematic areas of rural/international development within BIRD's portfolios. YCDP beneficiaries will be engaged for a maximum of one year (commencing January 2023) after which they will graduate from the programme.



COMMUNITY SERVICE

Academic staff continued to serve as Editorial Board members and reviewers of International Journals. Senior members play the roles of Principal Investigators, Coordinators, Moderators and Members of Committees, Boards and also as a technical consultants/ advisor to both National and International Institutes. Staff also served on various KNUST boards and committees, professional associations and other national and corporate organization boards.

ANALYTICAL SUPPORT SERVICES AND EVALUATIONS FOR SUSTAINABLE SYSTEMS IN WEST AFRICA (ASSESS-WA) PROJECT

The Bureau continued to lead the University in the implementation of a 9-year USAID Funded partnership Project, the Analytical Support Services and Evaluations for Sustainable Systems in West Africa (ASSESS-WA). The

project which commenced in April 2014 and was scheduled to end in March 2019 has been given a No Cost Extension for another two years ending December 2023. ASSESS is responsible for evaluations of programmes in the US Government's West Africa Regional



Economic Growth (REG) portfolio in Agriculture, Environment, Trade and Energy. ASSESS-West Africa is managed by the United States Department of Agriculture (USDA), two Land Grant Universities in United States of America (University of Rhode Island, URI, and Delaware State University, DSU) and Kwame Nkrumah University of Science and

Technology, (KNUST), Kumasi. Prof. Paul Sarfo-Mensah and Dr. Ebenezer Owusu-Addo are the Principal Investigator and Co-Principal Investigator, respectively of the Project on KNUST Campus with counterparts at URI. BIRD is also the coordinating department of the METSS Activity financed by the USAID.

ASSESSMENT, ANALYSIS, AND DEVELOPMENT OF TOOLS TO STRENGTHEN THE USE OF EVIDENCE IN POLICIES AND LEGISLATION IN AFRICA (TSUE)

There is growing recognition of the importance of evidence in national decision-making and the crucial role of parliamentarians and their support staff in ensuring that evidence-based approaches are used for strengthening oversight, budgeting resource appropriation, legislation, and policymaking across all sectors. It is important to emphasize that given the nature of parliamentary business, parliamentarians deal with various subjects/issues while carrying out their legislative functions, the use of evidence cuts across all sectors of their work.

Parliamentarians and their staff need data and evidence to make decisions that effectively, equitably, and justly allocate resources and meet people's social and economic needs. However, they face major technical and political challenges related to the generation and the use of evidence to inform policies. This challenge is acute in Africa given the dearth of information and analysis about the conditions, problems, and solutions of social and economic development. Parliaments in Africa lack the capacity to compile and use evidence in the design, oversight, and evaluation of legislation and policies on the



critical economic and social issues facing various countries on the continent. Better use of evidence by Parliamentarians, and associated research and policy making bodies will facilitate better development outcomes, and more transparent and efficient governance.

This project funded by USAID aimed to improve access to evidence used by parliamentarians and policy makers in their legislative and policy making work. Under the project, the following reports/documents have produced to facilitate the uptake of evidence in Parliaments:

- Assessment of Current State of Use of Evidence, Government Oversight, and Accountability Structures, and Legislative and Policy-Making Processes
- Guides and toolkits to strengthen evidence-based legislation and policies
- Development and dissemination of syntheses and Knowledge Products (KPs) on the use of evidence in legislation and policies
- Dialogue forums and exchanges for lessons-sharing on evidence use.
- Thirteen videos (13) were also produced and published on the TSUE online repository to highlight some of the successes, challenges and lessons learned by Members of Parliaments on ways to strengthen evidence use and achieve greater outcomes for

development. Some of these videos have been posted at the USAIDAfrica Youtube Channel and generated over 80 views in the first month of its publication.

- An online repository to host TSUE materials and other related materials on evidence use and knowledge translation has been developed and linked to the website of the Bureau of Integrated Rural Development (BIRD) of the Kwame Nkrumah University of Science and Technology (KNUST).
- TSUE also facilitated the subscription of the research centres of the Parliament of Uganda and Parliament of Ghana to Statistica, a data website hosting over 1,000,000 statistics on more than 80,000 topics and the Journal of Africa Affairs to aid their access and use of evidence to support legislative, oversight and policy-making functions.
- The Activity supported the development of a website for the Africa Parliamentarians Network on Development Evaluation (APNODE) to increase the dissemination of products and materials that will improve use of evidence among Parliamentarians and policy-makers in Africa

Project Team: Prof. Paul Sarfo-Mensah, Dr. Ebenezer Owusu-Addo, Dr Albert Arhin, Dr. Thomas Yeboah, Mr. Nathaniel Mensah-Odum



RETROSPECTIVE ASSESSMENT OF PAST USAID LEGISLATIVE STRENGTHENING PROGRAMMES IN KENYA AND UGANDA



This project funded by USAID Africa Bureau builds on the TSUE. USAID legislative strengthening and economic governance projects have frequently supported Parliamentary Budget Offices (PBOs) and relevant committees to conduct the analysis required to conduct their role in budget authorization (revenue and expenditure) and oversight. For instance, Uganda established their PBO in 2001 and USAID provided training, equipment, and technical assistance as the office grew into its new functions. In Kenya, USAID supported reformers in the National Assembly who established their PBO in 2007 as a unit under the Directorate of Information and Research Services through a resolution of parliament. In order to learn from such interventions to strengthen legislative assistance programmes, this ex-post review is being undertaken to review donor interventions

in PBOs and similar efforts to support committees on budget oversight.

The literature review and primary data collection have been completed. It is anticipated that the assessment will provide insights into the extent to the various protocols, Standard Operating Procedures (SOPs), or manuals that were developed with donor support are still in practice or relevant; and, whether the variety of products or resources offered continue and at what scale when compared to the previous interventions. The project includes BIRD staff and an external assessment team contracted by KNUST. Project report will be submitted in December 2022.

Project Team: Prof. Paul Sarfo-Mensah, Dr. Ebenezer Owusu-Addo, Dr Albert Arhin, Dr. Thomas Yeboah, Nathaniel Mensah-Odum



Meta-Evaluation: Quality Review and Synthesis of USAID Evaluations in the Africa Region Conducted Between 2017-2021

This project funded by USAID is being undertaken to support USAID Africa Bureau programmes. The quality of evaluations conducted in the Africa region has gradually improved since the adoption of USAID's Evaluation Policy in 2012. However, there are still significant quality challenges which have been documented through various evaluation quality assessments. This assessment of evaluation quality covers a sample of evaluations conducted in the

African Region from 2017 to 2021. AFR expects the results of this activity to generate information that will raise awareness among Africa Mission and Africa Bureau leadership about the strengths and weaknesses of the evaluations produced by the Bureau as a whole. Information on factors affecting evaluation quality will help the Bureau and Missions to devise strategies for quality improvement. In addition, this assessment sheds light on overall project/activity performance in the Africa Region, including some of the key factors that facilitate or inhibit performance. The project includes BIRD staff and an external assessment team contracted by KNUST. Project report was submitted in December 2022.

Project Team: Dr. Ebenezer Owusu-Addo, Prof. Paul Sarfo-Mensah, Dr Albert Arhin

CONTRIBUTIONS TO GLOBAL RESEARCH



STROBE-Equity Reporting Guideline: Improving social justice in observational studies: ongoing

Health inequities can go frequently unreported in observational studies. This project comprises international group of scientists, educators, decision-makers, ethicists, funders, and patients, using an integrated knowledge

translation approach, proposes to develop an extension to the STROBE (STrengthening the Reporting of OBservational studies in Epidemiology) guideline to deal specifically with these disparities. The overall goal is to develop guidance on reporting health equity considerations in observational studies to make health equity data more readily available for synthesis and decision-making. This project is planned with a global stream and an Indigenous research stream, and carried out with an integrated knowledge translation approach. The project embeds a parallel stream focused on evidence related to Indigenous research. After



assessing available guidance for reporting health equity in observational studies and assessing current reporting, they plan to seek international feedback, and conduct an evidence and consensus-driven process to develop a reporting guideline. The project started in January 2021. The following papers have been completed: scoping review of existing guidance on equity reporting in observational studies; the methods study protocol has been submitted. A series of empirical studies are planned for 2023, followed by a global consensus meeting, with the final reporting guideline and statement expected in 2024. BIRD staff, Dr. Ebenezer Owusu-Addo is part of the international group of scientists working on the STROBE-Equity Reporting Guideline.

Accounting for diversity in randomised controlled trials: *ongoing*

Ethnically diverse participants remain underrepresented in medical research, especially in Randomised Controlled Trials (RCTs). Trial populations with poor diversity are a public health issue. The need to include ethnically diverse participants in RCTs has therefore, been widely recognised by researchers, policy-makers, service providers, and consumers. This project comprises international group of scientists, educators, decision-makers, trialists, funders, and consumers, using an integrated knowledge translation approach, to develop an inclusion extension to the Consolidated Standards of Reporting Trials (CONSORT) guideline to deal specifically with diversity in trials. The aim of this research is to produce foundational guidance materials for the recruitment, collection and reporting of relevant variables and techniques for inclusion of ethnic

minorities in RCTs. The project started in February 2022 and will end by December 2023. To date, a systematic review of systematic reviews on reporting of variables related to ethnic diversity in randomised controlled trials has been completed. Primary data collection has also been completed in Australia. BIRD staff, Dr. Ebenezer Owusu-Addo is part of the international group of scientists working on this project.

Development of World Health Organization's Operational Framework for Monitoring of Social Determinants of Health Equity: *ongoing*

This project, led by the Department of Social Determinants of Health, World Health Organization aims at developing a global framework for monitoring the social determinants of health (SHD). The SDH are closely linked to the achievement of the United Nations (UN) 2030 Sustainable Development Goals (SDGs) and targets, which aim to encourage action in areas that have profound effects on health, wellbeing, and health equity. Routine monitoring of social determinants of health equity—that is, SDH and actions (e.g., interventions and policies) addressing SDH that can promote health equity—is critical to ensure governments make informed decisions, implement actions, and are held accountable for creating healthier and more equitable communities. In the UN 2030 Agenda for Sustainable Development, Member States underscored the importance of “quality, accessible, timely, and reliable disaggregated data...to help with the measurement of



progress and to ensure no one is left behind". This project focuses on developing an operational framework to provide guidance for countries in monitoring of SDH and actions (e.g., interventions and policies) to address SDH that can help to achieve health equity. BIRD staff, Dr. Ebenezer Owusu-Addo is part of the international group of scientists working on this project.

Youth Participation in Employment Policies and Programmes in Africa: Addressing the Disconnects: ongoing

Promoting youth employment has been a key priority for governments and development partners in Africa for several years and will be for some time to come. This is driven by concerns over the continent's young population and their current, and future, needs for decent employment, as well as concerns about what might happen if these needs remain unfulfilled. Recently, there have been increasing calls for meaningful youth participation in policies and programmes that matter for youth employment. This research explores how youth engagement takes place across a range of policy areas relevant to youth employment, drawing on desk research, case studies and data from interviews with policy advisors based in various African countries and donor headquarters. BIRD staff, Dr. Thomas Yeboah, is part of the international group of researchers working on this project.



TEMPORAL EMPLOYMENT FOR UNEMPLOYED GRADUATES

During the year under review, BIRD engaged a total of 105 unemployed graduates in implementing various commissioned research and evaluation studies. Aside from the creation of temporal employment for these unemployed graduates, the Department contributed to building their capacity and equipped them with employable skills in research, evaluation and data analytics.



PARTICIPATION IN KNUST'S 70TH ANNIVERSARY EXHIBITION



BIRD participated in the KNUST's 70th Anniversary Exhibition held on Tuesday 10th to Friday 13th May 2022 at the Great Hall of KNUST. Three posters were exhibited showcasing the impactful research being undertaken by the department.

Exhibits from BIRD

1. **University-Community Engagement Model for Sustainable and Inclusive Rural Development.**

This model has been developed in line with the University's mission of impacting and transforming lives through constructive partnership. It is about taking the 'Gown' to the communities. It is an approach to partnering with District Assemblies for the attainment of the Sustainable Development Goals (SDGs).

2. **Institutionalisation of Integrated Natural Resource Management (INRM) Principles and Approaches into the Strategy and Academic Programmes of the College of Agriculture and Natural Resources (CANR).**

This innovates the best ways to tackle wicked problems within the natural resource sector through the application of INRM principles and approaches. Two MPhil programmes namely Natural Resource and Environmental Governance (NREG) and Sustainable Integrated Rural Development in Africa (SIRDA) are currently being run by CANR to build the capacity of the next generation of INRM experts.

3. **Informing Policy and Programming through Evidence and Data.**

BIRD has developed innovative approaches to gathering evidence through programme evaluation, baseline studies and impactful research to serve the needs of government ministries, departments and agencies, and development partners (e.g., USAID, IFAD, UNFPA, World Bank etc).





BIRD staff at the KNUST 70th Anniversary Exhibition

REFURBISHING OF BIRD CONFERENCE ROOM

BIRD refurbished its conference room during the period under review. In collaboration with The University Information Technology Systems (UITs) of KNUST, fibre networks were extended to the office. This has significantly improved internet connectivity of the office. Aside from changing the conference room furniture, teleconferencing facilities including 70-inch computer screen, webcam, microphones were installed to ensure that the facilities can be used for hosting webinars, virtual training and other forms of virtual engagements.



A cross-section of the refurbished conference room



COLLABORATIONS

International collaborations

The Bureau collaborated with the under-listed international organizations on various tasks:

1. Winrock International
2. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
3. Institute for Housing and Urban Development Studies, Erasmus University, Rotterdam.
4. PBL Netherlands Environmental Assessment Agency
5. University of Iowa, USA.
6. United State Department of Agriculture (USDA), Washington Office
7. United State Agency for International Development (USAID) Accra Office
8. University of Rhode Island, USA
9. National Ageing Research Institute, Australia
10. INTRAC, UK
11. The International Centre for Evaluation and Development (ICED)



Local Collaborations

The Bureau collaborated with the under-listed local institutions and organizations on various tasks:

1. Ministry of Local Government, Decentralisation and Rural Development (MLGDRD)
2. Sekyere Afram Plains District Assembly,
3. Sene East District Assembly



PUBLICATIONS 2021-2022

During the 2021/2022 academic year, 18 papers in referred journals were published from of the research activities undertaken by BIRD staff. In addition, BIRD members contributed to five (5) book chapters and two (2) conference proceedings. Some of the areas covered include Mining, Gender, Housing, Public Health and Health promotion, Sanitation and Waste management, Youth Development, Climate Change and Sustainable development. Nine (9) technical reports and four (4) policy briefs were also presented.

Peer-Reviewed Journal Articles

1. Wireko-Gyebi, R. S., Arhin, A. A., Braimah, I., King, R. S., & Lykke, A. M. (2022). Working in a Risky Environment: Coping and Risk Handling Strategies Among Small-scale Miners in Ghana. *Safety and Health at Work*, 13(2), 163-169.
2. Adu-Gyamfi, A., Owusu-Addo, E., Inkoom, DKB., & Asibey, MO. (2022) Peri-urban interface: An alternative residential location of low-income migrants in Kumasi, Ghana. *Cities* 123: 103570.
3. Akowuah, JA., Owusu-Addo, E., & Opuni, AA. (2022). Predictors of Anaemia Prevalence Among Ghanaian Pregnant Women: A Cross-Sectional Study. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 59, 00469580221086919.
4. Yeboah, T., Antoh, E. F., & Kumi, E. (2022). Strategic responses of microfinance institutions to the Coronavirus disease (COVID-19) crisis in Ghana. *Development in Practice*, 32(1), 112-127.
5. Kofi K., Kpodo, E. E., Bonuedi, I. & Forson, P. (2022), "Does inflation uncertainty hurt domestic investment? Empirical evidence from Ghana", *Cogent Economics & Finance*, 10:1, 2115673. <https://doi.org/10.1080/23322039.2022.2115673>.
6. Kamasa, K., Nortey, D.N., Boateng, F. and Bonuedi, I. (2022), "Impact of tax reforms on revenue mobilisation in developing economies: empirical evidence from Ghana", *Journal of Economic and Administrative Sciences*. <https://doi.org/10.1108/JEAS-01-2022-0011>.
7. Ojeleke, O., Groot, W., Bonuedi, I., & Pavlova, M. (2022). The impact of armed conflicts on health-care utilization in Northern Nigeria: A difference-in-differences analysis. *World Medical & Health Policy*, 1– 41. <https://doi.org/10.1002/wmh3.501>.
8. Addison, M., Ohene-Yankyera, K., Acheampong, P.P. & Wongnaa, C.A. (2022). The impact of uptake of selected agricultural technologies on rice farmers' income distribution in Ghana. *Agriculture & Food Security*, Vol 11(2), <https://doi.org/10.1186/s40066-021-00339-0>
9. Acheampong, P.P., Addison M. & Wongnaa, C. A. (2022). Assessment of impact of adoption of improved cassava varieties on yields in Ghana: An endogenous switching approach. *Cogent Economics & Finance*, 10:1, 2008587, DOI: 10.1080/23322039.2021.2008587



10. Adjei, P.O.W., Serbeh, R., Adjei, J.O. & Addison, M. (2022). Women's political participation and performance as local government authorities under Ghana's decentralization system. *SN Social Science*, 2, Article number:251. <https://doi.org/10.1007/s43545-022-00559-6>
11. Wongnaa, C.A., Nyarko, M., Addison, M. and Awunyo-Vitor, D. (2021). Viability of artisanal timber milling: cases from Ghana. *Journal of Enterprising Communities: People and Places in the Global Economy*, Vol. 16 (2), pp. 278-298. <https://doi.org/10.1108/JEC-08-2020-0153>
12. Osei, L., Yeboah, T., Kumi, E., & Antoh, E. F. (2021). Government's ban on Artisanal and Small-Scale Mining, youth livelihoods and imagined futures in Ghana. *Resources Policy*, 71, 102008.
13. Owusu-Addo, E., Ofori-Asenso, R., Batchelor, F., Mahtani, K., & Brijnath, B. (2021). Effective implementation approaches for healthy ageing interventions for older people: A rapid review. *Archives of Gerontology and Geriatrics*, 92, 104263.
14. Amoah, P. A., Nyamekye, K. A., & Owusu-Addo E. (2021). A multidimensional study of public satisfaction with the healthcare system: a mixed-method inquiry in Ghana. *BMC Health Services Research*. 21(1):1-7.
15. Anafo, D., Owusu-Addo, E., & Takyi, S. A. (2021) Urban planning and public policy responses to the management of COVID-19 in Ghana, *Cities & Health*, DOI: 10.1080/23748834.2021.1876392
16. Mahumud, R. A., Sahle, B., Owusu-Addo, E., Chen, W., Morton, W. L., & Renzaho M. N. (2021) Association of dietary intake, physical activity, and sedentary behaviours with overweight and obesity among 282,213 adolescents in 89 low and middle income to high-income countries. *International Journal of Obesity*; <https://doi.org/10.1038/s41366-021-00908-0>.
17. Rawal, L., Sahle, B. W., Smith. B. J., Kanda, K., Owusu-Addo, E., & Renzaho, A. M. (2021) Lifestyle interventions for type 2 diabetes management among migrants and ethnic minorities living in industrialized countries: a systematic review and meta-analyses. *BMJ Open Diabetes Research and Care*, 19(1): e001924.
18. Sarfo-Mensah, P., Haruna, M. and Amaning, K. (2021). Effects of Artisanal Small-Scale Mining on Household Food Availability and Access in the Amansie West District of Ghana *International Journal of Agriculture & Environmental Science* 7 (3), 1-8

Book chapters

1. Owusu-Addo, E. (2022). Researching the Practices of Policymakers in Implementing a Social Policy Intervention in Ghana. In: Potvin, L., Jourdan, D. (eds) *Global Handbook of Health Promotion Research*, Vol. 1. Springer, Cham. https://doi.org/10.1007/978-3-030-97212-7_31
2. Acheampong, P. P., Owusu-Danquah, E., Agyeman, K., Dankwa, O. K. and Addison, M. (2021). Research and Development for Improved Cassava Varieties in Ghana: Farmers' Adoption and Effects on Livelihoods. In A. Frediansyah, (Ed.), *Cassava - Biology, Production, and Use*. (pp 75-90), IntechOpen; <http://dx.doi.org/10.5772/>



intechopen.87488

3. Sumberg, J., Flynn, J., Oosterom, K., Yeboah, T., Crossouard, B., and Thorsen, D. (2021) African Youth and the Rural Economy: Points of Departure. in Sumberg, J. (eds). Youth and the Rural Economy in Africa: Hard Work and Hazard, (pp. 1-17). CAB International, Oxfordshire, UK. ISBN-13: 978 1 78924 501 1 9
4. Thorsen, D., and Yeboah, T. (2021). Mobility and the rural landscape of opportunity. in Sumberg, J. (eds), Hard Work and Hazard: Youth and the Rural Economy in Africa: Hard Work and Hazard, (pp. 78-89). CAB International, Oxfordshire, UK, ISBN-13: 978 1 78924 501 1
5. Yeboah, T., Crossouard, B. and Flynn, J. (2021). Young people's imagined futures. in Sumberg, J. (eds), Youth and the Rural Economy in Africa: Hard Work and Hazard, (155-169), CAB International, Oxfordshire, UK, ISBN-13: 978 1 78924 501 1

Papers published in conference proceedings

1. Owusu-Addo, E (2022) Health Promotion Research: Reflections on the practices of policy makers in implementing a social policy intervention in Ghana. Proceedings from the 24th International Union for Health Promotion & Education World Conference on Health Promotion, May 15-19, 2019, Montreal, Quebec, Canada.
2. Owusu-Addo, E. & Owusu-Addo, S. B. (2022) The Impact of COVID-19 on Adolescent Girls' Sexual and Reproductive Health and Rights: A Mixed Method Study. Proceedings from the 24th International Union for Health Promotion & Education World Conference on Health Promotion, May 15-19, 2019, Montreal, Quebec, Canada

Technical Reports and Working Papers

1. Owusu-Addo E., Yeboah T., Mensah-Odum N., Arhin A. (2022) An Assessment of Child Labour Monitoring and Remediation Systems (CLMRSs), Washington DC: WinRock International
2. Owusu-Addo, E., Amisah S., Sarfo-Mensah P, Arhin A., Yeboah T., Mensah-Odum N., Amo S. (2022) Performance Evaluation of the Sustainable Fisheries Management Project. Washington DC: USAID. https://pdf.usaid.gov/pdf_docs/PA00ZPDS.pdf
3. Owusu-Addo E., Yeboah T., Antoh EF., Arhin A., Mensah-Odum N., King R., Manu A (2022). Mid-Term Evaluation of the United Nations Joint Programme on Empowering Adolescent Girls through Improved Access to Reproductive Health Education and Rights-Based Quality Sexual and Reproductive Health Services in Ghana. Accra: UNFPA & UNICEF.
4. Owusu-Addo E., Owusu-Addo SB., Mensah-Odum N., Bansal A., Deliege A., Yoshikawa M. (2022). The Impact of COVID-19 on Adolescent Sexual and Reproductive Health and Rights. Accra: UNICEF Ghana
5. Yeboah, F.K., Feige, D., Proctor, H., Yeboah, T. (2021) Capturing the Synergies Between Youth livelihoods and Resilient Agri-Food Systems. African Agriculture Status Report. AGRA



6. Yeboah, T. and Flynn, J. (2021). Rural Youth Employment in Africa: An Evidence Review. Online at <https://includeplatform.net/wp-content/uploads/2021/05/Rural-youth-employment-in-Africa-evidence-review.pdf>
7. Okyere, S.; Frimpong Boamah, E.; Asante, F. and Yeboah, T. (2021) Policies and Politics Around Children's Work in Ghana, ACHA Working Paper 8, Brighton: Action on Children's Harmful Work in African Agriculture, IDS, DOI: 10.19088/ACHA.2021.003
8. Brijnath, B., Antoniadis, J., Dow, B., Doyle, C., Gerber, K., Feldman, P., Owusu-Addo, E., Goh, A., and Dang, T.H. 2021. A scoping study to identify key issues for the mental health of older people. Prepared for the National Mental Health Commission by the National Ageing Research Institute: Parkville, Victoria.
9. Owusu-Addo, E., Brijnath, B., Antoniadis, J., Dow, B., Doyle, C., Gerber, K., Feldman, P., Goh, A., and Dang, T.H. 2021. Mental health interventions for older people: A review of reviews. Prepared for the National Mental Health Commission by the National Ageing Research Institute: Parkville, Victoria.



FINANCES

Statement of Comprehensive Income for the year ended 30th October 2022¹

Revenue	GHS
Contract/ Commissioned Projects	1,004,111.60
Grant	519,142.46
Vehicle Income	201,898.70
Interest on Call Account	18,162.91
Refund of Interest on Fixed Deposit	7,958.49
Interest on Investment	144,813.38
Total Revenue	1,896,087.54

Expenditure	
Project Cost	924,752.00
Research Support	18,187.56
Staff Benefit	90,699.26
Operational Expenses	406,126.14
Others	95,350.31
Surplus / Deficit	360,972.27

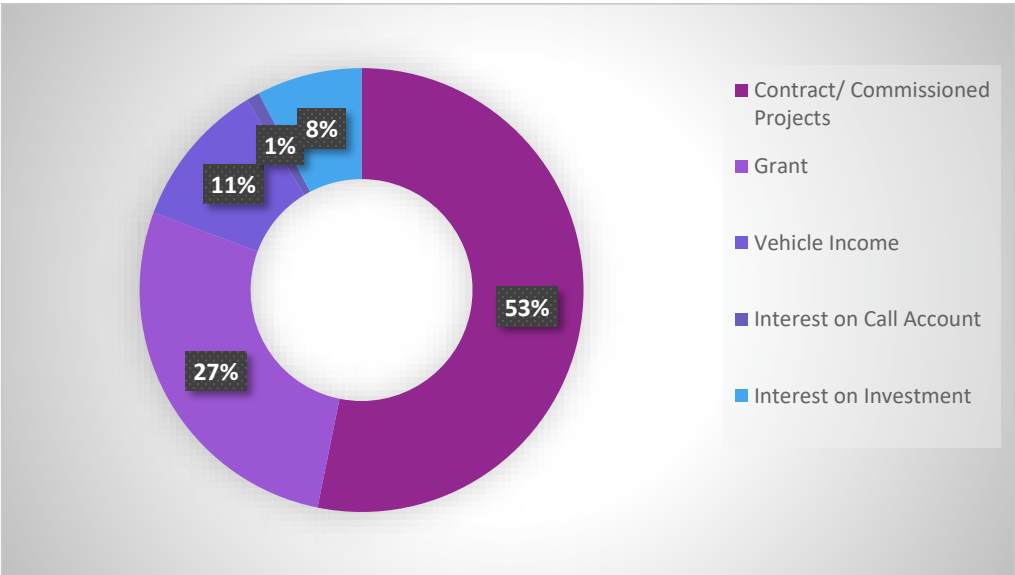
Fixed Deposit	742,757.53
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Dollar Account	USD
BIRD (OVERHEADS from Grants)	309,308.04
PI Share Balance	4,490.67
Kumasi Green Inclusive Project	27,805.54
Total	341,604.25

1 Full audited financial statements are part of KNUST's audited accounts



REVENUE BREAKDOWN



HOW YOU CAN HELP



Rural development, as it is proceeding now in Ghana, is not likely to meet the socioeconomic Sustainable Development Goals (SDGs) established in the 2030 Agenda for Sustainable Development. More pragmatic and sustained efforts are required to promote sustainable and inclusive rural development in Ghana. BIRD is committed to this agenda through our research, teaching and outreach programmes focused on improving the wellbeing and livelihoods of rural people. There are many ways you can get involved and make a difference.

Rural Development Endowment Fund (RDEF)

In 2023, BIRD will establish a Rural Development Endowment Fund. The objective of the RDEF is to provide a stable and predictable funding for BIRD to design and implement strategic development interventions in rural Ghana. These interventions will be designed and implemented using a co-creation approach with district and community level stakeholders. We count on your generous contributions to support this fund.

For further information about how you can support BIRD-KNUST, please call +233 (0) 322493501 or email us at bird@knust.edu.gh





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